

# **Automated Configuration Management System**



## **Task Force Summary**

# Purpose



To summarize the results of the ACMS Task Force and to initiate a dialogue about how to best use the results

# Outline



- Background
- What did we accomplish?
- What issues are outstanding?
- How can the Performance Specification be used?
- Next Steps?

# Background



- Current Engineering Data Management Environment
- Defining the task
- Methodology used
- Who was involved

# Current Engineering Data Environment



- Army data primarily stored in raster format
- Contractors are submitting tech data in more “intelligent” data formats
- TD/CMS can’t manage
  - “intelligent” data
  - Prior baselines
- Forces new producers to “reinvent” lost data intelligence
  - metadata
  - geometry

# Goals of Acquisition Reform



- Use contractor systems and data formats as much as possible
- Government won't own as much data
- Government must have access (insight) to contractor data
- Increase Government productivity

# Defining the Task?

Jan 97	Feb 97	Mar 97	Apr 97	May 97	Jun 97	Jul 97	Aug 97	Sep 97	Oct 97	Nov 97	Dec 97	Jan 98	Feb 98	Mar 98
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▲ CG AMC approves FAA Phase II Recommendation

▲ MG Caldwell states that “one size does not fit all”

▲ IEA submits ACMS Plan of Action

▲ AMSAA letter to HQ AMC asking for clarification on centralized funding and definition of Tech Loop

▲ CG AMC Approves ACMS Plan of Action

▲ MG Beauchamp approves revised scope, the expenditure of funds and issues letter to MSC CGs

▲ Mr. Adams suggested that a standard Army system might not be possible because of funding constraints.

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## Bottom Line for Task Force

- Develop Performance Specification that looks to the future for
  - Configuration Management
  - Tech Loop
- Ground rules for implementation still unclear and contradictory

# What did we do?



- Defined a Concept of Operations
- Established a Template for Performance Specification[s] based on this Concept of Operations (minus Validation Methods)



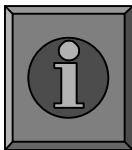
# What we were asked not to do?



- Prepare Continuity of Operations Plan (COOP)
- Prepare Acquisition Strategy
- Prepare Acquisition Plan
- Prepare SOW
- Prepare Test Plan
- Prepare Source Selection Criteria
- Prepare an Economic Analysis
- Prepare Solicitation

# Configuration Management

**Definition (MIL STD 2549)** “A management process for establishing and maintaining consistency of a product’s performance, functional, and physical attributes with its requirements, design and operational information throughout its life. ...”

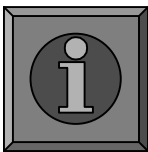


# Core Requirements for CM

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- Unique Identification
- Change management
- Verification & Audit
- Record Keeping

W H Y ???



# CM Supports



## ASSET MANAGEMENT

- You can't get the right material to the right place at the right time, if you don't know what you started with or how it has been changed/modified
- You can't efficiently recall defective parts if you don't know where they are installed.

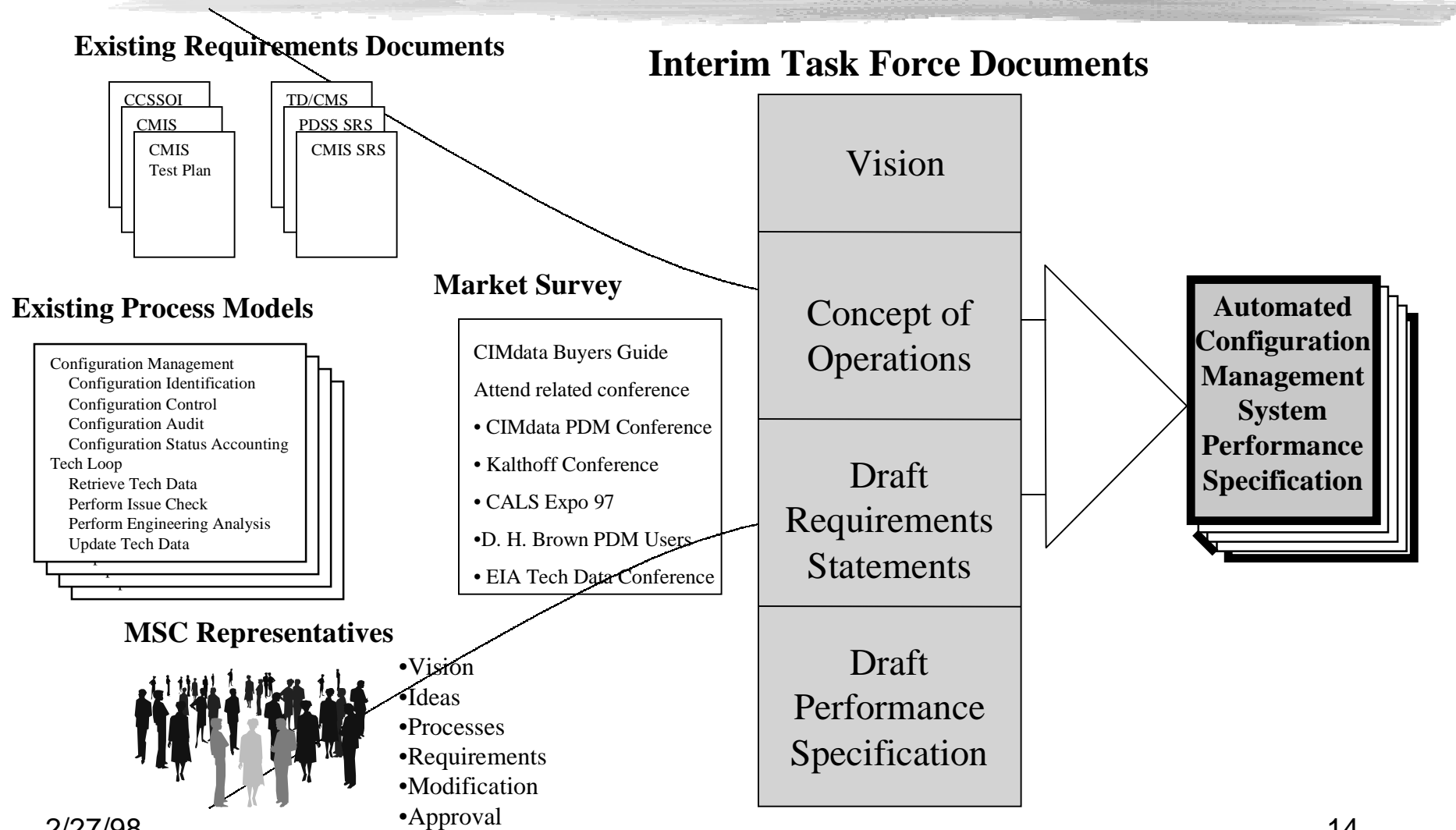
# Tech Loop Process



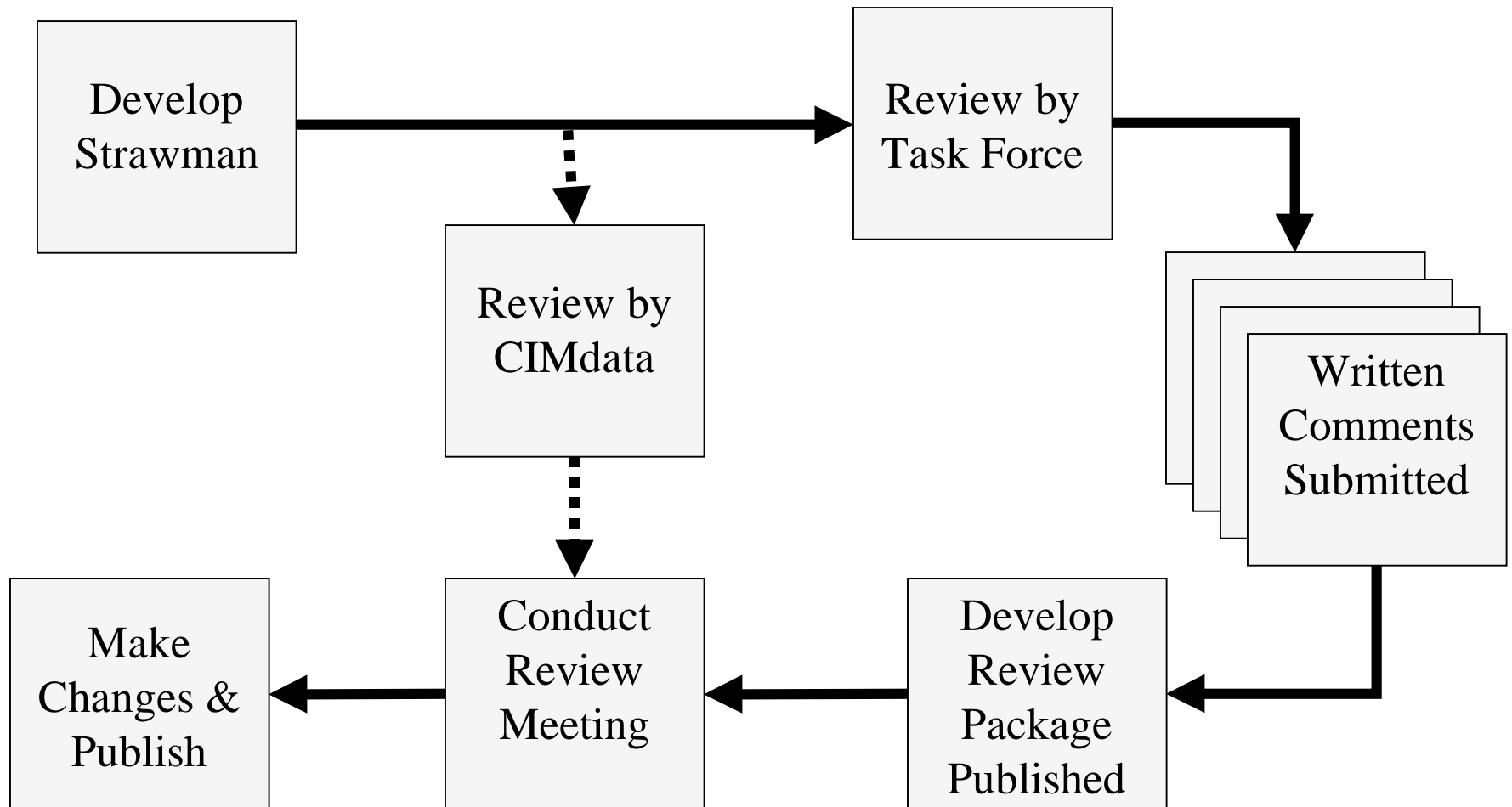
**Definition:** A process used to assemble product data and to review, modify and certify that the package is suitable for its intended use.

Jim Knowles, AMCRDA: “It is very important to remember that ACMS is to be an engineering system not a full blown Pre-Procurement System. This, currently, does not include the full range of data required for a complete [Pre-Procurement Input] PPI, e.g. Quality, Safety, Security, Maintenance input primarily in the form of Clauses (and their fill-ins), CDRLs and SOWs, required by procurement for a full solicitation.”

# Methodology



# Review Process

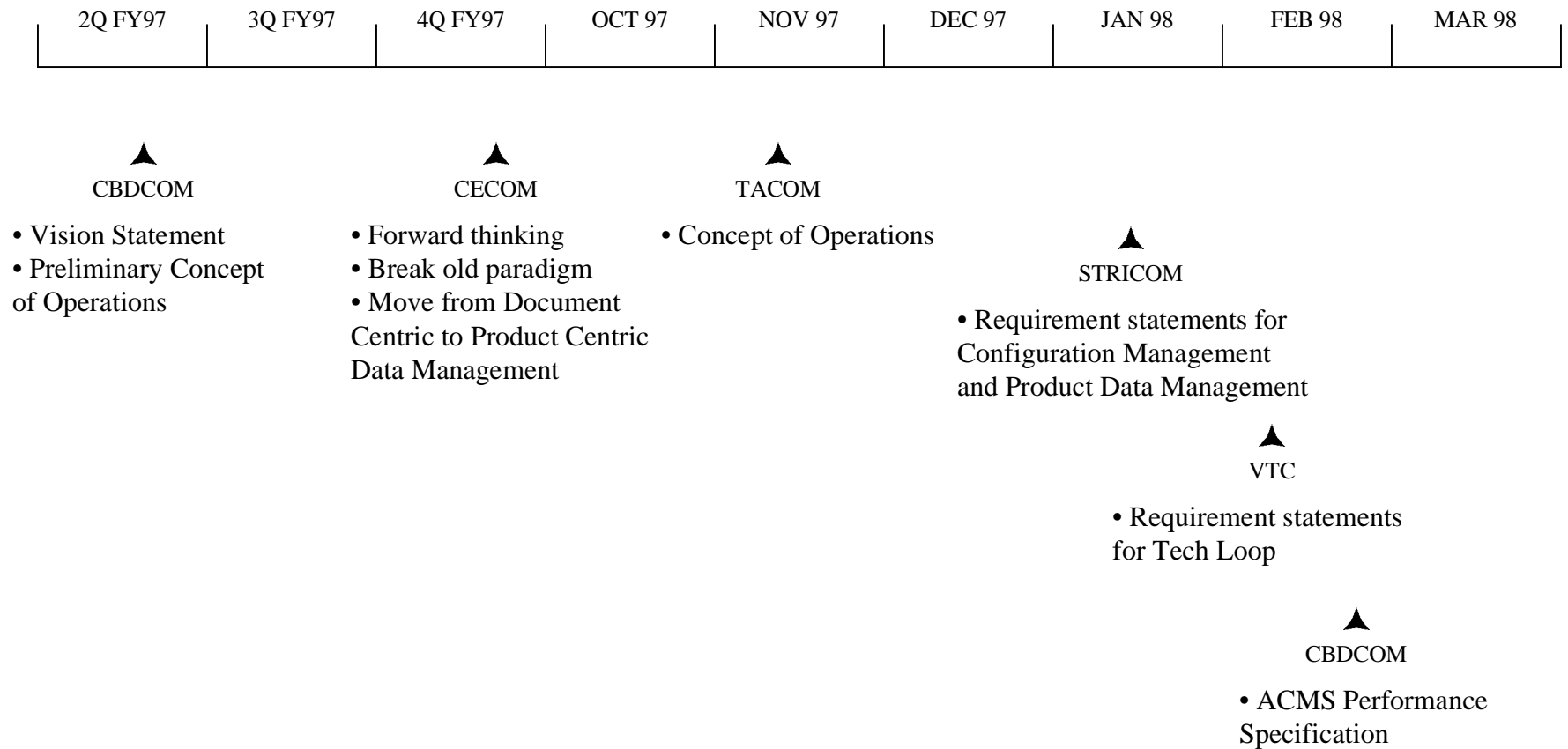


# Task Force Participation

Organization	3-Mar-97	13-Aug-97	4-Nov-97	13-Jan-98	23-Feb-98
HQ AMC	2	2			
AMCOM	1	1	3	5	
CBDCOM	4		1		
CECOM	3	5	2	1	
IOC	2	1	1	1	
SSCOM			2		
STRICOM	1	1	1	2	
TACOM	5	5	9	5	
TECOM	2		1		
AMSAA	4	3	4	2	
EDMS PMO	1	3	3	1	
LAISO	2	2	1		
MEA	1	1	1		
Ground Systems			1		
M1 Breacher			1	1	
Red River Army Depot			1	1	
Rock Island Arsenal		1	1	1	
Tobyhanna Army Depot	1	1	2		



# Task Force Meetings



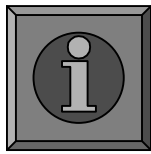
# ACMS Vision

***ACMS will provide the required data when it is needed and in a form that the user can apply to accomplish the mission. The required data consists of all the engineering data necessary to completely define an item for the intended purposes of specifying, designing, analyzing, manufacturing, maintaining, sustaining, testing, inspecting, and dispositioning that item over its entire life span. The ACMS must also operate in a diverse Army environment, integrate with other MSC business processes, and communicate with other MSC, government and industry information management systems.***

# A Paradigm Shift is Required!



*Transition from Document Centric to  
Product Centric Data Management*



# Concept of Operation



- Create federated system of systems
- Provide enterprise level visibility of data
- Use standard CITIS Interface (MIL STD 2549)
- Support Life Cycle Management
  - Product
  - Data

# What is 2549

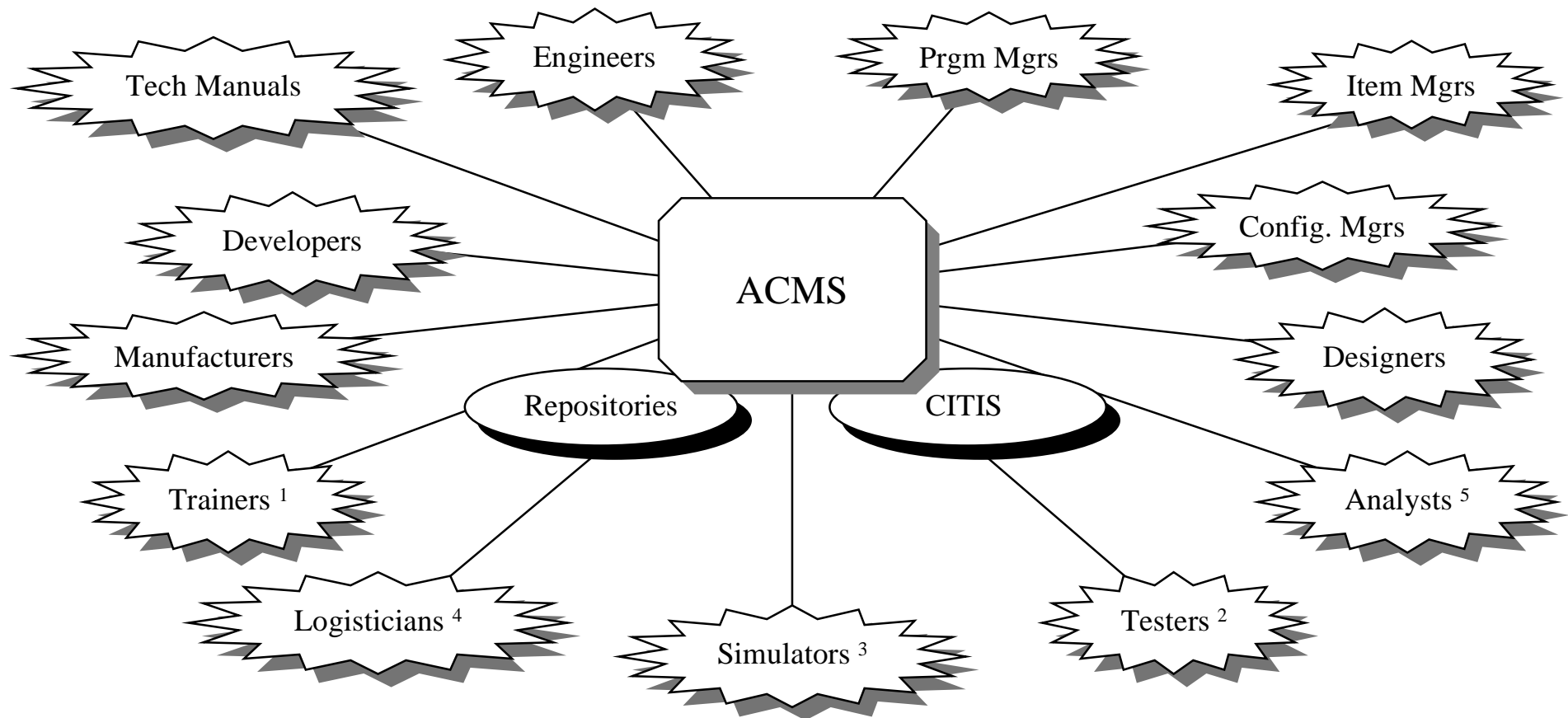


# MIL-STD-2549 Requirement



DoD activities are responsible for acquiring (delivery or access to) the configuration information necessary to support development, production, sustainment, modification and disposal. ... To accomplish this requirement, the Govt will maintain a system, or set of interconnected systems, which maintain the necessary information in a form which complies with Appendices B and C [of MIL-STD-2549]  
(source MIL-STD-2549)

# ACMS User Communities



1 - Including developers of training devices and simulations.

2 - Developmental & operational testers.

3 - Including developmental & war fighting simulations.

4 - Supporting maintenance, repair, & Total Asset Visibility.

5 - Survivability, industrial base, & operations analysts.

# ACMS Functional Capabilities



## Product Data Management

- Data Vaulting
- Workflow Management
- Product Structure Management
- Data Translation
- Imaging Services
- System Administration

## Configuration Management

- CM Data exchange
- Configuration Planning
- Configuration Identification
- Configuration Audit
- Configuration Control
- Status Accounting

## Tech Loop

- Tech Loop creation and maintenance
- Support Tech Loop Reviews
- Generate Tech Loop Reports



# What issues are outstanding?



- No Army position on 2549
- Other Army communities not involved or bought into ACMS
- No Army implementation plan (funding, direction)
- No Army Stakeholders at HQ AMC and HQ DA
- Publish as a Template, Performance Spec or Guide Spec

# Army use of 2549



- Untested
- Not perfect
- Need to migrate to National and international standards
- Potential for strong industry support if Army and DOD order data IAW it and build systems to use it

# Others who need to be involved



- PEO/PM and IPTs
- Logistics community
- Software community
- Acquisition community

# **Army ACMS Implementation Plan**



- Immediate Needs (next 12 months):
  - Funding
  - Direction
  - Strategic Plan
- Long Term Needs (by 2002):
  - Army IDE
  - Virtual IMMC

# Stakeholders



- Strong support from MG Beauchamp when he was AMCRDA
- Need Acquisition and Logistics support at AMC and DA levels
- Need HQ DA support to bridge PM/PEO gap

# Template/Perf Spec/Guide Spec

## ■ Template:

- Pro - Publish immediately and easily
- Con - No teeth for compliance, not a procurement document

## ■ Perf Spec:

- Pro - A procurement document
- Con - Will take longer to complete, tailoring dependent on time, money, and sites

## ■ Guide Spec:

- Pro - Gives guidance on tailoring
- Con - Not a procurement document

# How can the Perf Spec be used?



- Market Research tool
- Issue Template for immediate use
- Consensus building tool for 2002 vision
- Steer industry technology development
- MSC/DA/DOD approved document

# Next Steps



- Get stakeholders! (How about you!)
  - Funding
  - Direction
- Complete Validation Requirements
- Prepare Strategic Plan for ACMS
- Coordinate with other communities
- Test, endorse, and implement 2549
- Complete acquisition package for a standard Army ACMS